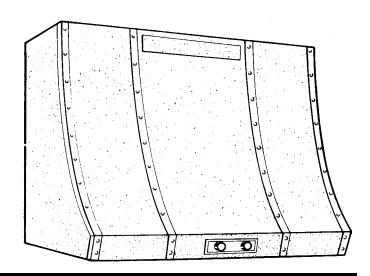


# 11000 SERIES SOLID STATE CONVERTIBLE CANOPY RANGE HOOD INSTALLATION INSTRUCTIONS



# **READ AND SAVE THESE INSTRUCTIONS**

### **WARNING**

## TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
- Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
- 4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Do not use this range hood with an additional speed control device.
- 7. Ducted fans must always be vented to the outdoors.
- 8. To reduce the risk of fire, use only metal ductwork.
- 9. This unit must be grounded.

#### TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:

- Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- Always turn hood ON when cooking at high heat or when cooking flaming foods.
- Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- 4. Use proper pan size. Always use cookware appropriate for the size

## **WARNING**

of the surface element.of food being prepared.

# TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOWING:\*

- SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. If the flames do not go out immediately, EVACUATE AND CALL THE FIRE DEPARTMENT.
- 2. NEVER PICK UP A FLAMING PAN You may be burned.
- DO NOT USE WATER, including wet dishcloths or towels a violent steam explosion will result.
- 4. Use an extinguisher ONLY if:
  - You know you have a Class ABC extinguisher and you already know how to operate it.
  - B. The fire is small and contained in the area where it started.
  - C. The fire department is being called.
  - D. You can fight the fire with your back to an exit.
  - \* Based on "Kitchen Fire Safety Tips" published by NFPA.

## **CAUTION**

- For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
- To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
- 3. For best capture of cooking impurities, your range hood should be mounted 18-24" above the cooking surface.
- Please read specification label on product for further information and requirements.

## - TOOLS AND MATERIALS REQUIRED

- Drill, electric or ratchet drive, with 5/16" and 1/2" wood bit (for drilling starter holes) and 1-1/4" wood bit (to drill an access hole in the cabinet or kitchen wall for the electric power line).
- One common and one phillips head screwdriver (to secure hood mounting screws to the cabinet and hood sheet metal parts).
- ☐ Pliers (for opening knockouts).
- ☐ Electrical supplies for the type of wiring being installed.

- Pencil and ruler for marking locations.
- Saber saw or keyhole saw for cutting duct opening in wall or soffit.

**Ducted Installation Only:** 

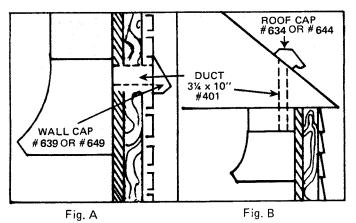
☐ Caulking, metal snips, duct tape, duct (with elbows and transition, if necessary) and wall cap or roof caps, as required.

## PLANNING THE DUCTWORK

Begin planning the ductwork by deciding where the duct will run between the range hood and the outside. For best performance, use the shortest possible duct run and a minimum number of elbows. There are several choices shown below.

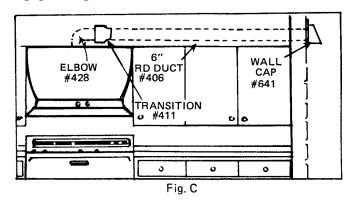
NOTE: Shown are typical installations. For maximum efficiency, use  $3\frac{3}{4}$ " x 10" rectangular duct. In more complex ducting situations, a ducted range hood can be converted to round duct by means of a transition.

 OUTSIDE WALL — If your range is located on an exterior wall, duct horizontally through the wall. This is the most economical installation, and also offers top performance because the duct run is so short that it offers practically no resistance. (Fig. A)

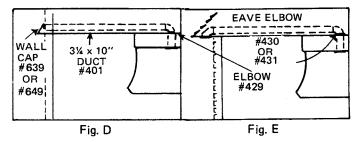


NOTE: If ducting directly off the back of the hood, special care must be taken to make sure that the damper in the damper/duct connector and the damper in the wall cap do not interfere with each other when the hood is operating. This could result in either inadequate air delivery or backdrafts. If this condition exists, remove the hood damper flap. Sometimes, when using a wall cap, it is easier to duct vertically and then use an elbow.

- 2. THROUGH ATTIC TO ROOF OR EAVE This is usually the most efficient and economical installation if the range is located on an inside wall and there is attic space above. (Fig. B)
- THROUGH SOFFIT TO OUTSIDE WALL This is often the best solution when the range is located on an inside wall in a two story home. (Fig. C)



4. BETWEEN JOISTS — TO OUTSIDE WALL OR EAVE



5. WHEN "THERE'S NO WAY" — UNDER CEILING — TO OUT-SIDE WALL — Suppose you can't use (2) because you have a two story home. You can't use (3) because you have no soffit or don't want to take the old one out. The joists run the wrong way for (4) or you don't want to tear up your ceiling.

To duct to the outside, attach the duct under the ceiling and cover it with a false wood beam or use other materials to camouflage the ductwork (Fig. F)

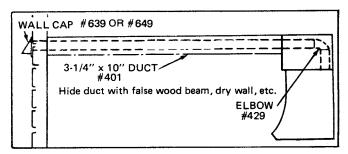


Fig. F

## **UNPACKING**

Unpack the hood and check the contents. Along with the canopy, you should have received:

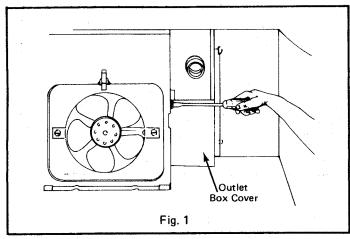
- Plastic bag containing:
  - Four No. 10AB x 1½ long sheet metal screws (for mounting canopy to wall or soffit or for use with plastic hollow wall anchors
  - Four 5/16" washers
  - Four plastic hollow wall anchors

- Two 1/4" black sheet metal screws (for attaching damper/duct connector to canopy hood
- One aluminum filter
- Damper duct connector

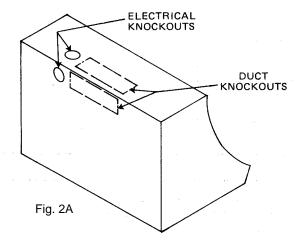
## PREPARING THE RANGE HOOD

NOTE: To avoid motor bearing damage and/or noisy and unbalanced impellers keep drywall spray, construction dust, etc., off power unit.

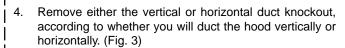
 Remove sheet metal screw on outlet box cover and lift cover out. (Fig. 1)



2. Remove proper electrical knockout according to whether you will bring power to the hood from the soffit or the wall. (Fig. 2A)



 Insert a screwdriver into the knockout slot and bend the knockout back and forth. You may have to use pliers to pull the loosened knockout free. (Fig. 2B)



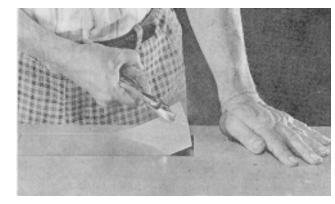


Fig. 3

5. Install the damper/duct connector (Fig. 4)

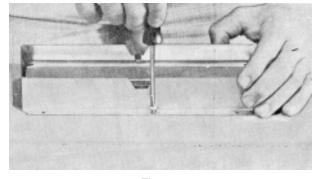


Fig. 4

5. For ductfree installation **only**, remove louver cover from top front of hood. (FIG. 5)

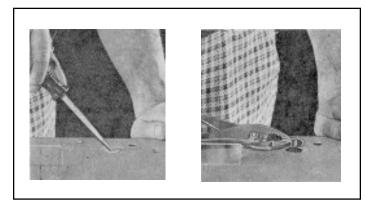
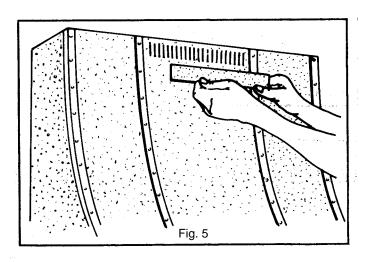


Fig. 2B



## PREPARING THE INSTALLATION LOCATION

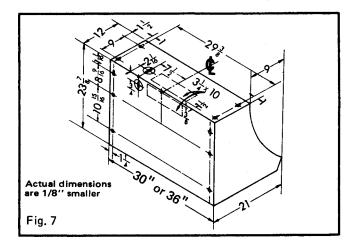
#### NOTE

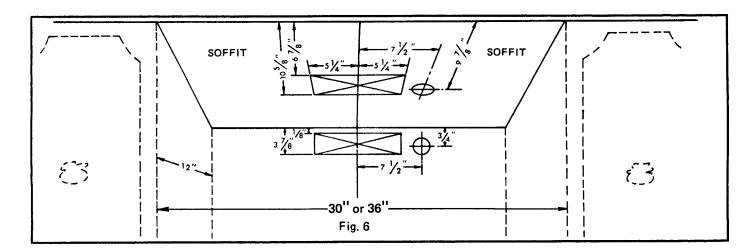
The range hood should be mounted so the bottom of the hood is 18" to 24" above the cooking surface and the top front edge of the hood should be flush with the front of the soffit.

- 7. Measure and mark the following (Figs. 6 & 7)
  - a. Electrical line opening.

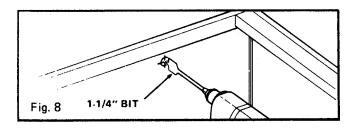
b. duct opening in wall or soffit.

c. (For ventless installation only) Center hood in place beneath soffit and flush with front of soffit. Trace keyhole slots onto soffit.





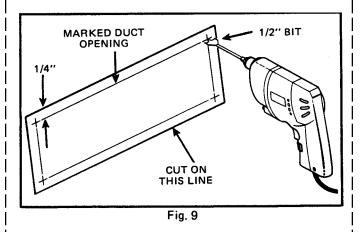
8. Use a 1-1/4" drill bit to drill the opening for the electrical line. If drilling in the wall, be carefull not ot cut existing cables. (Fig. 8)



## NOTE:

Omit steps 9a through 9c for ventless installation.

- 9. Ducted installation only (Steps 9a 9c
  - a. Measure and mark the duct opening in the soffit or wall.
  - b. Drill four pilot holes in the corners of the marked duct opening with a 1/2" wood bit, and with a saber saw, cut out the opening in the wall or soffit. (Fig. 9).
  - c. Hold hood under the soffit and trace the keyhole slots onto the soffit.



## PREPARING THE INSTALLATION LOCATION (CONT.)

10. Screw four supplied 1½" long screws (for mounting the hood) into the exact center of the narrow end of the traced keyhole mounting slots marked on the soffit. Do not turn the mounting screws in all the way — allow 3/8" of screws to project, so that hood can be fitted into place. (The screws will be tightened later.)

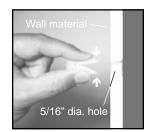
For wall mounting, use the 1½" long screws into wall studs or additional wall framing.

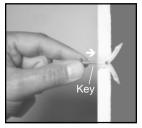
If wall studs or additional wall framing are not available, follow these steps:

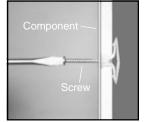
- 1. Drill a 5/16" diameter hole in wall material.
- Fold anchor, insert anchor into hole, and tap anchor flush with wall.
- 3. Push key into anchor to toggle anchor open behind wall.

#### Do not hammer key!

4. Hold component in place over anchor. Insert screw and tighten until screw is flush with component. Do not overtighten!







## **INSTALLING THE DUCTWORK**

#### NOTE

These instructions will follow the plans made on page 2. Start at the exterior and run the ductwork back to the hood.

For best possible performance of your range hood, use the shortest possible duct run and a minimum number of elbows.

Never vent a range hood into an attic space because a buildup of grease will become a fire hazard.

Use only metal ductwork (do not use plastic duct) Assemble securely so that in case of fire on the range, the fire will be contained inside the duct system.

Tape all duct connections to make them secure and airtight.

- Follow the appropriate directions below for the type of ductwork are installing.
  - a. To install a wall cap discharge (Fig. 11): Use a saber saw or keyhole saw to cut a hole slightly larger than duct size used so that cap will line up easily with duct. Install casing strips on the outside of a wood house if required. Run the required amount of ductwork back to the location of the hood and trim the last section of ductwork so cap will be flush with outside wall. Fasten wall cap to ductwork and nail or screw cap to wall. Caulk all around flange with high quality caulking compound.

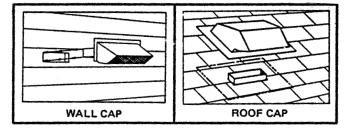


Fig. 11

b. To install a roof cap: Cut a hole in roof slightly larger than duct size being used. Run ductwork back to location of hood. Leave approximately 3/4 "for ductwork projecting above roof surface on high side.

Trim ductwork parallel to roof pitch, and seal all around duct with roof cement.

Carefully lift shingles and slide back of flange under shingles. Nail flange to roof under shingles at top two corners and two sides. Nail directly to roof in four places at bottom.

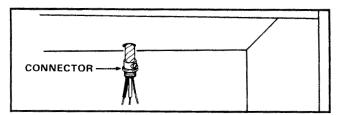
Using roof cement, seal all nail heads and shingles which were cut or fitted. Do not scale bottom edge of flange. (Fig. 11)

## INSTALLING THE RANGE HOOD

#### **SAFETY WARNING**

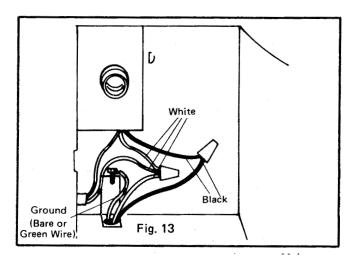
Turn off the proper 120 volt circuit at the service entrance before wirng the range hood.

12. Bring electrical cable through access hole drilled in the wall or soffit. Split the cable for 6" and install the proper connector for the type of cable being used. Remove the lock nut from the connector and let the prepared cable project through the soffit or wall opening so it is ready for installation into the range hood. (Fig. 12)



- 13. Position the hood in place so that:
  - a. The electrical line is routed through the appropriate knockout opening. This step will have to be accomplished while positioning the hood.
  - b. The damper/duct connector fits into the duct opening in the soffit or wall.
- 14. Install lock nut on the electrical connector and tighten securely.

15. Make the electrical connection using wire nuts to connect white wire to white, black wire to black, and ground the hood to the prepared hole using the green ground screw provided with the hood. (Fig. 13)



- Replace the wring box cover and screw. Make sure that all wiring is contained safely inside.
- 17. Install 75 watt (R30) or 150 watt (R40) flood light. Ordinary light bulb (100 watt max.) may also be used. Turn on power and check operation of fan and light.

## **OPERATING INSTRUCTIONS**

#### **SWITCHES**

Right knob controls light.

Left knob controls blower. Rotate knob CLOCKWISE to turn blower ON to HIGH speed. Further CLOCKWISE rotation decreases blower speed. Rotate knob fully COUNTERCLOCKWISE (past HIGH speed) to turn fan OFF.

### **CLEANING**

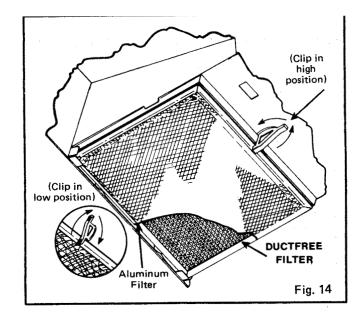
**Finish -** Keep your range hood clean using a mild detergent suitable for painted surfaces.

Aluminum filters should be cleaned frequently with a detergent solution to avoid grease build up. They are also dishwasher safe.

Do not wash the ductfree filter. Replace it whenever the colored material on the back becomes noticeably dirty or discolored. Filters should last twelve months with normal use.

#### **FILTER REMOVAL**

- Turn filter retainer clip to one side. Lift out old filter and discard it. For MICROTEK™ System II hoods, discard both the aluminum filter and the ductfree filter, if hood is equipped with both. For other hoods equipped with aluminum and ductfree filters, discard both filters and replace with MICROTEK™ System I filter.
- Place new MICROTEK™ System Filter under filter retainer clip.
   Make sure that blue side of filter is next to fan blade. Turn filter clip so that clip holds filter in place.



Make sure that arrows on retainer clip point toward front and back of hood.

MICROTEK™ System filters are not washable. Filter should last up to twelve months with normal use. Replace filter whenever it becomes noticeably dirty or discolored.

## **OPERATING INSTRUCTIONS (CONT.)**

#### TO REMOVE FAN ASSEMBLY

Be sure power is disconnected. Remove Filters. Remove the two screws holding the motor bracket to the range hood and unplug the fan assembly. Be careful not to allow fan assembly to drop when the screws are removed. (Fig. 15).

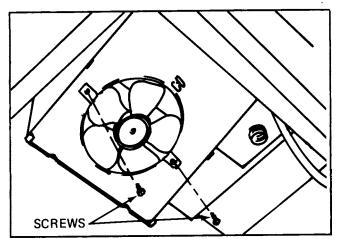


Fig. 15

#### HOW TO AVOID A COMMON RANGE-TOP GREASE FIRE

- Your range hood provides a protective barrier between the cooking surface and the cabinets.
- Keep fan, filters and grease laden surfaces CLEAN according to instructions.
- Always turn hood ON when cooking at high heat to keep the cooking area and the hood cooler.
- · Use high heat settings only when necessary.
- Never leave cooking surface unattended. Boil-over causes smoking and greasy spillovers that may ignite.
- · Always use adequate-sized utensils.
- If preparing flaming foods, such as Cherries Jubilee, always turn hood ON to HIGH to prevent a high heat situation which can cause damage or fire.

# HOW TO EXTINGUISH A COMMON RANGE-TOP GREASE FIRE

- Never pick up a flaming pan. If dropped, flames can spread quickly.
- DO NOT USE WATER! A violent stream explosion may result.
   Wet dishcloths or towels are also dangerous.
- Smother flames with a close fitting lid, cookie sheet or metal tray.
- Flaming grease can also be extinguished with baking soda or a multi-purpose dry chemical extinguisher.
- Turn off surface units if you can do so without getting burned.

#### **BROAN ONE YEAR LIMITED WARRANTY**

Broan warrants to the original consumer purchaser of its products that such products will be free from defects in materials or workmanship for a period of one year from the date of original purchase. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

During this one-year period, Broan will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service.

THIS WARRANTY DOES NOT EXTEND TO FLUORESCENT LAMP STARTERS AND TUBES. This warranty does not cover (a) normal maintenance and service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by Broan), faulty installation or installation contrary to recommended installation instructions.

The duration of any implied warranty is limited to the one-year period as specified for the express warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

BROAN'S OBLIGATION TO REPAIR OR REPLACE, AT BROAN'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. BROAN SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty supersedes all prior warranties.

To qualify for warranty service, you must (a) notify Broan at the address stated below or telephone: 1-800-637-1453, (b) give the model number and part identification and (c) describe the nature of any defect in the product or part. At the time of requesting warranty service, you must present evidence of the original purchase date.

Broan-NuTone LLC, 926 West State Street, Hartford, WI 53027 (1-800-637-1453)

# SERVICE PARTS -

Service parts for the Broan 11000 Series Convertible range hood are shown (with part numbers) in Figure 16. List the hood model number and the part numbers of all parts being ordered. Order parts from your local dealer or Broan Manufacturing.

model number and the part numbers of all parts being ordered. Order parts from your local dealer of Broan Manufacturing.				
KEY NO.	PART NUMBER	DESCRIPTION		
1		Canopy		
2	99090632	Nameplate		
3	99260470	Nut for Light Switch		
	99260470	Nut for Motor Switch		
4		Knob		
5	99360115			
6	99030132	Solid State Fan Switch		
7	97005328	Light Switch		
8	98005773	Aluminum Wiring Tubing		
9	98004963	Switch Cover		
10	97006931	Aluminum Filter		
12	99420472	Filter Retaining Clip		
14	99020248	Fan Blade		
15	99260466	Lock Nut, 6-32*		
16	99160304	Machine Screw, 10-24 x 3/8*		
17	98005568	Motor Mounting Bracket		
18	97011224	Motor Assembly (Includes Key Nos. 14, 15 & 17)		
19	97006241	Motor Receptacle		
20	99270423	Bulb Holder with Wires		
21	98005619	Outlet Box Cover		
22	99170245	Sheet Metal Screw, 8-18 x 3/8 Hex Head*		
23	99100420	Foam Gasket for Vent Cover		
24	98005629	Vent Cover - White		
	98005630	Vent Cover - Almond		
	98005631	Vent Cover - Golden Wheat		
	98005632	Vent Cover - Avocado		
	98005633	Vent Cover - Coffee		
	98005635	Vent Cover - Black		
0.5	98009855	Vent Cover - Biscuit	5	
25	97005544	Damper Assembly (Includes Key Nos. 25 & 26)	Ĭ Ă	
26	98005221	Damper Flap	4 ♀ 6 22	
27	99100379 97008257	Damper Bushing Sheet Metal Nuts (contains 2 nuts)	25	
	97006237	Sheet Metal Nuts (contains 2 huts)		
*Standard Hardware. May be purchased locally.				
**Not Illustrated.				
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Figure 16. 11000 Series Range Hood, Exploded View and Parts List